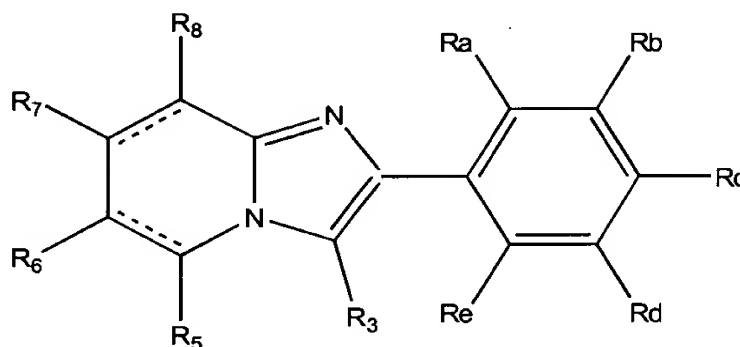


**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**In the Claims:**

1. (currently amended) A compound of formula (I)(A):



wherein both dashed lines are complete a carbon-carbon double bond, or both are absent;

R<sub>3</sub> is H, C<sub>1-6</sub> alkyl, phenyl, or benzyl;

each of R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> is independently H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, halo, or amino, with the proviso that R<sub>7</sub> is methyl;

one of R<sub>a</sub>, R<sub>b</sub>, R<sub>c</sub>, R<sub>d</sub>, and R<sub>e</sub> is -WYZ and the others are independently selected from H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, halo, and amino;

W is O-R<sub>9</sub>, wherein R<sub>9</sub> is C<sub>1-6</sub> alkylene, C<sub>2-6</sub> alkynylene, C<sub>2-6</sub> alkenylene, phenylene, or C<sub>2-5</sub> heterocyclic bivalent radical;

Y is absent, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkynyl, C<sub>2-6</sub> alkenyl, or C<sub>1-6</sub> alkoxy;

Z is C<sub>2-8</sub> heterocyclic radical with at least one basic nitrogen atom in the ring, optionally including in the ring up to 3 additional heteroatoms or moieties independently selected from O, C=O, N, NH, NG, S, SO, and SO<sub>2</sub>, wherein G is R<sub>15</sub>, COR<sub>15</sub>, COOR<sub>15</sub>, SO<sub>2</sub>R<sub>15</sub>, SO<sub>2</sub>N or CSR<sub>15</sub>; and R<sub>15</sub> is C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkynyl, C<sub>2-6</sub> alkenyl, C<sub>3-7</sub> cycloalkyl, or C<sub>4-7</sub> cycloalkenyl; and

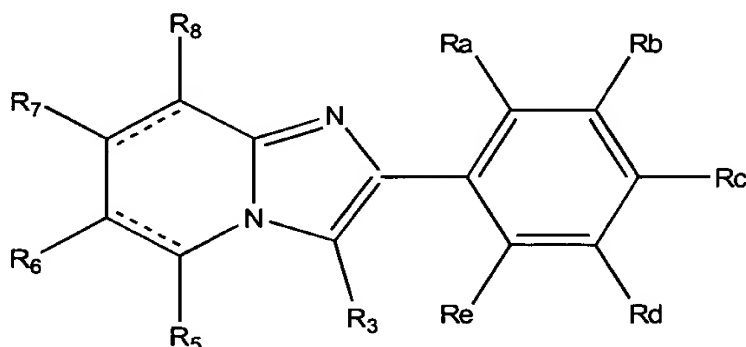
each of the above hydrocarbyl or heterocyclic groups being optionally substituted with between 1 and 3 substituents selected from C<sub>1-3</sub> alkyl, halo, hydroxy, C<sub>2-5</sub> heterocyclic radical, phenyl, and phenyl(C<sub>1-3</sub> alkyl); and wherein each of the above heterocyclic groups may be attached to the rest of the molecule by a carbon atom or a heteroatom; or a pharmaceutically acceptable salt, amide, ester, or hydrate thereof.

2. (previously amended) A compound of claim 1, wherein Z comprises piperidyl, morpholinyl, piperazinyl, pyrrolidyl, or a C<sub>6-8</sub> cycloalkylimino radical.
3. (deleted)
4. (original) A compound of claim 1, wherein W is hydroxy-substituted C<sub>2-4</sub> alkoxy, C<sub>2-4</sub> alkoxy, C<sub>2-4</sub> alkylamino, butenyl, or butynyl.
5. (previously amended) A compound of claim 1, wherein W comprises propoxy, ethoxy, propylamino, or ethylamino.
6. (deleted)
7. (original) A compound of claim 1 wherein at least one of R<sub>a</sub>, R<sub>b</sub>, R<sub>d</sub>, and R<sub>e</sub> is methyl.
8. (currently amended) A compound of claim 1, wherein each of R<sub>5</sub>, R<sub>6</sub>, and R<sub>8</sub> is independently H, methyl, ethyl, methoxy, ethoxy, fluoro, or chloro; or wherein one of R<sub>a</sub>, R<sub>b</sub>, R<sub>c</sub>, R<sub>d</sub>, and R<sub>e</sub> is WZ and the others are independently selected from H, methyl, ethyl, methoxy, ethoxy, fluoro, or chloro; ~~or both.~~

9. (original) A compound of claim 1, wherein both dashed lines are present to form two carbon-carbon double bonds.
10. (original) A compound of claim 1, wherein both dashed lines are absent.
11. (original) A compound of claim 1, wherein R<sub>a</sub> or R<sub>e</sub> is methyl, fluoro, or methoxy.
12. (deleted)
13. (deleted)
14. (currently amended) A compound of claim 1, wherein  
R<sub>3</sub> is H or methyl;  
each of R<sub>b</sub> and R<sub>d</sub> is independently H, methyl, or methoxy;  
R<sub>8</sub> is H, methyl, fluoro, or chloro;  
each of R<sub>5</sub> and R<sub>6</sub> is H;  
each of R<sub>a</sub> or R<sub>e</sub> is independently H, methyl, fluoro, or chloro;  
W is C<sub>2-4</sub> alkoxy, C<sub>4</sub> alkylene, C<sub>4</sub> alkynylene, C<sub>4</sub> alkenylene, -N(R<sub>10</sub>)SO<sub>2</sub>-(C<sub>1-5</sub> alkyl), -(CO)O-C<sub>2-3</sub> alkyl, -(CO)NH-(C<sub>1-3</sub> alkyl), -NH(CO)(C<sub>1-3</sub> alkyl), or -NH(C<sub>1-6</sub> alkyl); and  
Z is pyrrolidyl, piperidyl, morpholinyl, piperazinyl, or (piperidyl)-piperidyl.
15. (deleted)
16. (previously amended) A compound of claim 2, selected from 2-(4-Piperidinopropoxy-2-methylphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Cycloheptylamino-propoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Pyrrolidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine; and 2-(4-Piperidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine.

17. (previously amended) A compound selected from 2-[4-(3-Piperidin-1-yl-propoxy)-phenyl]-5,6,7,8-tetrahydro-imidazo[1,2-a]pyridine; and 7-methyl-2-[2-methyl-4-(3-piperidin-1-yl-propoxy)-phenyl]-5,6,7,8-tetrahydro-imidazo[1,2-a]pyridine.
18. (original) A compound of claim 16, having the formula 2-(4-Piperidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine.
19. (previously amended) A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically-acceptable carrier.
20. (currently amended) A pharmaceutical composition of claim 19, wherein said compound has a formula wherein  $R_3$  is H or methyl; each of  $R_b$  and  $R_d$  is independently H, methyl, or methoxy;  $R_8$  is H, methyl, fluoro, or chloro; each of  $R_5$  and  $R_6$  is H; each of  $R_a$  or  $R_e$  is independently H, methyl, fluoro, or chloro; W is  $C_{2-4}$  alkoxy; and Z is pyrrolidyl, piperidyl, morpholinyl, piperazinyl, or (piperidyl)-piperidyl.
21. (previously amended) A pharmaceutical composition of claim 20, wherein said compound has a formula selected from 2-(4-Piperidinopropoxy-2-methylphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Cycloheptylamino-propoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Pyrrolidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Piperidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine; and 7-methyl-2-[2-methyl-4-(3-piperidin-1-yl-propoxy)-phenyl]-5,6,7,8-tetrahydro-imidazo[1,2-a]pyridine.
22. (original) A pharmaceutical composition of claim 20, wherein said compound is 2-(4-Piperidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine.

23. (currently amended) A method for treating disorders mediated by the histamine H<sub>3</sub> receptor in a patient, said method comprising administering to the patient a pharmaceutically effective amount of compound of formula (I):



wherein both dashed lines are complete a carbon-carbon double bond, or both are absent;

R<sub>3</sub> is H, C<sub>1-6</sub> alkyl, phenyl, or benzyl;

each of R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> is independently H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, halo, or amino;

one of R<sub>a</sub>, R<sub>b</sub>, R<sub>c</sub>, R<sub>d</sub>, and R<sub>e</sub> is -WYZ and the others are independently selected from H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, halo, and amino;

W is O-R<sub>9</sub>, wherein R<sub>9</sub> is C<sub>1-6</sub> alkylene, C<sub>2-6</sub> alkynylene, C<sub>2-6</sub> alkenylene, phenylene, or C<sub>2-5</sub> heterocyclic bivalent radical;

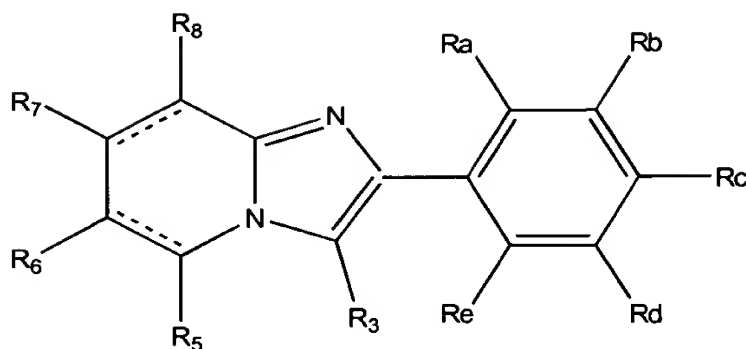
Y is absent, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkynyl, C<sub>2-6</sub> alkenyl, or C<sub>1-6</sub> alkoxy;

Z is C<sub>2-8</sub> heterocyclic radical with at least one basic nitrogen atom in the ring, optionally including in the ring up to 3 additional heteroatoms or moieties independently selected from O, C=O, N, NH, NG, S, SO, and SO<sub>2</sub>, wherein G is R<sub>15</sub>, COR<sub>15</sub>, COOR<sub>15</sub>, SO<sub>2</sub>R<sub>15</sub>, SO<sub>2</sub>N or CSR<sub>15</sub>; and R<sub>15</sub> is C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkynyl, C<sub>2-6</sub> alkenyl, C<sub>3-7</sub> cycloalkyl, or C<sub>4-7</sub> cycloalkenyl; and

each of the above hydrocarbyl or heterocyclic groups being optionally substituted with between 1 and 3 substituents selected from C<sub>1-3</sub> alkyl, halo, hydroxy, C<sub>2-5</sub> heterocyclic radical, phenyl, and phenyl(C<sub>1-3</sub> alkyl); and wherein each of the above

heterocyclic groups may be attached to the rest of the molecule by a carbon atom or a heteroatom;  
 or a pharmaceutically acceptable salt, amide, ester, or hydrate thereof.

24. (previously amended) A method of claim 23, wherein said compound is selected from 2-[4-[2-(1-Methyl)-2-pyrrolidino]ethoxy-3-methylphenyl]imidazo[1,2-a]pyridine; 2-(4-Piperidinopropoxy-2-methylphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Cycloheptylamino-propoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Pyrrolidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Piperidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-[4-(3-Piperidin-1-yl-propoxy)-phenyl]-imidazo[1,2-a]pyridine; 2-(4-Piperidinopropoxyphenyl)-8-methylimidazo[1,2-a]pyridine; 2-[4-(3-Piperidin-1-yl-propoxy)-phenyl]-5,6,7,8-tetrahydro-imidazo[1,2-a]pyridine; 7-methyl-2-[2-methyl-4-(3-piperidin-1-yl-propoxy)-phenyl]-5,6,7,8-tetrahydro-imidazo[1,2-a]pyridine; 2-(4-piperidino-propoxyphenyl)-8-methylimidazo[1,2-a]pyridine; and 2-(4-morpholinopropoxyphenyl)-8-methylimidazo[1,2-a]pyridine.
25. (original) A method of claim 23, wherein said compound is 2-(4-Piperidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine.
26. (currently amended) A method for treating a patient with a central nervous system disorder, said method comprising administering to the patient a pharmaceutically-effective amount of a compound of formula (I):



wherein both dashed lines are complete a carbon-carbon double bond, or both are absent;

$R_3$  is H, C<sub>1-6</sub> alkyl, phenyl, or benzyl;

each of  $R_5$ ,  $R_6$ ,  $R_7$  and  $R_8$  is independently H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, halo, or amino;

one of  $R_a$ ,  $R_b$ ,  $R_c$ ,  $R_d$ , and  $R_e$  is -WYZ and the others are independently selected from H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, halo, and amino;

W is O- $R_9$ , wherein  $R_9$  is C<sub>1-6</sub> alkylene, C<sub>2-6</sub> alkynylene, C<sub>2-6</sub> alkenylene, phenylene, or C<sub>2-5</sub> heterocyclic bivalent radical, and  $R_{10}$  is H, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkynyl, C<sub>2-6</sub> alkenyl, phenyl, or C<sub>2-5</sub> heterocyclic radical;

Y is absent, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkynyl, C<sub>2-6</sub> alkenyl, or C<sub>1-6</sub> alkoxy;

Z is C<sub>2-8</sub> heterocyclic radical with at least one basic nitrogen atom in the ring, optionally including in the ring up to 3 additional heteroatoms or moieties independently selected from O, C=O, N, NH, NG, S, SO, and SO<sub>2</sub>, wherein G is  $R_{15}$ , COR<sub>15</sub>, COOR<sub>15</sub>, SO<sub>2</sub>R<sub>15</sub>, SO<sub>2</sub>N or CSR<sub>15</sub>; and  $R_{15}$  is C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkynyl, C<sub>2-6</sub> alkenyl, C<sub>3-7</sub> cycloalkyl, or C<sub>4-7</sub> cycloalkenyl;

and

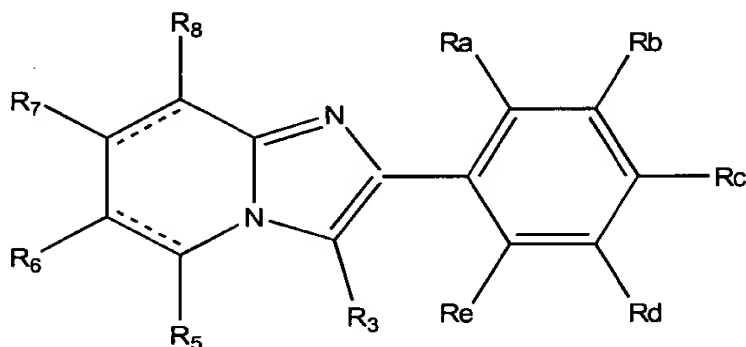
each of the above hydrocarbonyl or heterocyclic groups being optionally substituted with between 1 and 3 substituents selected from C<sub>1-3</sub> alkyl, halo, hydroxy, C<sub>2-5</sub> heterocyclic radical, phenyl, and phenyl(C<sub>1-3</sub> alkyl); and wherein each of the above heterocyclic groups may be attached to the rest of the molecule by a carbon atom or a heteroatom;

or a pharmaceutically acceptable salt, amide, ester, or hydrate thereof.

27. (deleted)
28. (original) A method of claim 26, wherein said central nervous system disorder is selected from sleep/wake disorders, arousal/vigilance disorders, dementia, Alzheimer's disease, epilepsy, narcolepsy, eating disorders, motion sickness, vertigo, attention deficit hyperactivity disorder, learning and memory disorders, mild cognitive impairment, and schizophrenia.
29. (original) A method of claim 26, wherein said central nervous system disorder is selected from Alzheimer's disease, epilepsy, eating disorders, learning and memory disorders, migraine, sleep/wake disorders, allergic rhinitis, schizophrenia, mild cognitive impairment, and asthma.
30. (previously amended) A method of claim 26, wherein said compound is selected from 2-[4-[2-(1-Methyl)-2-pyrrolidino]ethoxy-3-methylphenyl]imidazo[1,2-a]pyridine; 2-(4-Piperidinopropoxy-2-methylphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Cycloheptylamino-propoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Pyrrolidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Piperidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-[4-(3-Piperidin-1-yl-propoxy)-phenyl]-imidazo[1,2-a]pyridine; 2-(4-Piperidinopropoxyphenyl)-8-methylimidazo[1,2-a]pyridine; 2-[4-(3-Piperidin-1-yl-propoxy)-phenyl]-5,6,7,8-tetrahydro-imidazo[1,2-a]pyridine; 7-methyl-2-[2-methyl-4-(3-piperidin-1-yl-propoxy)-phenyl]-5,6,7,8-tetrahydro-imidazo[1,2-a]pyridine; 2-(4-piperidino-propoxyphenyl)-8-methylimidazo[1,2-a]pyridine; and 2-(4-morpholinopropoxyphenyl)-8-methylimidazo[1,2-a]pyridine.



31. (deleted)
32. (original) A method of claim 26, wherein said disorder is selected from sleep/wake disorders, arousal/vigilance disorders, attention deficit hyperactivity disorder, and learning and memory disorders.
33. (currently amended) A method for treating a patient with an upper airway allergic response, said method comprising administering to the patient a pharmaceutically-effective amount of a compound of formula (I):



wherein both dashed lines are complete a carbon-carbon double bond, or both are absent;

R<sub>3</sub> is H, C<sub>1-6</sub> alkyl, phenyl, or benzyl;

each of R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> is independently H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, halo, or amino;

one of R<sub>a</sub>, R<sub>b</sub>, R<sub>c</sub>, R<sub>d</sub>, and R<sub>e</sub> is -WYZ and the others are independently selected from H, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, halo, and amino;

W is O-R<sub>9</sub>, wherein R<sub>9</sub> is C<sub>1-6</sub> alkylene, C<sub>2-6</sub> alkynylene, C<sub>2-6</sub> alkenylene, phenylene, or C<sub>2-5</sub> heterocyclic bivalent radical, and R<sub>10</sub> is H, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkynyl, C<sub>2-6</sub> alkenyl, phenyl, or C<sub>2-5</sub> heterocyclic radical;

Y is absent, C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkynyl, C<sub>2-6</sub> alkenyl, or C<sub>1-6</sub> alkoxy;

Z is C<sub>2-8</sub> heterocyclic radical with at least one basic nitrogen atom in the ring, optionally including in the ring up to 3 additional heteroatoms or moieties independently selected from O, C=O, N, NH, NG, S, SO, and SO<sub>2</sub>, wherein G is R<sub>15</sub>, COR<sub>15</sub>, COOR<sub>15</sub>, SO<sub>2</sub>R<sub>15</sub>, SO<sub>2</sub>N or CSR<sub>15</sub>; and R<sub>15</sub> is C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkynyl, C<sub>2-6</sub> alkenyl, C<sub>3-7</sub> cycloalkyl, or C<sub>4-7</sub> cycloalkenyl;

and

each of the above hydrocarbyl or heterocyclic groups being optionally substituted with between 1 and 3 substituents selected from C<sub>1-3</sub> alkyl, halo, hydroxy, C<sub>2-5</sub> heterocyclic radical, phenyl, and phenyl(C<sub>1-3</sub> alkyl); and wherein each of the above heterocyclic groups may be attached to the rest of the molecule by a carbon atom or a heteroatom; or a pharmaceutically acceptable salt, amide, ester, or hydrate thereof.

34. (previously amended) A method of claim 33, wherein said compound is selected from 2-[4-[2-(1-Methyl)-2-pyrrolidino]ethoxy-3-methylphenyl]imidazo[1,2-a]pyridine; 2-(4-Piperidinopropoxy-2-methylphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Cycloheptylamino)propoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Pyrrolidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-(4-Piperidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine; 2-[4-(3-Piperidin-1-yl-propoxy)-phenyl]-imidazo[1,2-a]pyridine; 2-(4-Piperidinopropoxyphenyl)-8-methylimidazo[1,2-a]pyridine; 2-[4-(3-Piperidin-1-yl-propoxy)-phenyl]-5,6,7,8-tetrahydro-imidazo[1,2-a]pyridine; 7-methyl-2-[2-methyl-4-(3-piperidin-1-yl-propoxy)-phenyl]-5,6,7,8-tetrahydro-imidazo[1,2-a]pyridine; 2-(4-piperidinopropoxyphenyl)-8-methylimidazo[1,2-a]pyridine; and 2-(4-morpholinopropoxyphenyl)-8-methylimidazo[1,2-a]pyridine.
35. (original) A method of claim 33, wherein said compound is 2-(4-Piperidinopropoxyphenyl)-7-methylimidazo[1,2-a]pyridine.